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REQUEST FOR RECONSIDERATION UNDER 37 C.F.R. § 1.116
EXPEDITED PROCEDURE
GROUP 2834
PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Jean-Charles MERCIER, et al.

Docket No: Q60439

Appln. No.: 09/653,408

Group Art Unit: 2834

Confirmation No.: 5345

Examiner: J. Gonzalez

Filed: August 31, 2000

For: A WIND-POWER GENERATOR POD CONSTITUTED BY THE BODY OF AN ELECTRICITY GENERATOR

REQUEST FOR RECONSIDERATION UNDER 37 C.F.R. § 1.116

ATTN: BOX AF
Commissioner for Patents
Washington, D.C. 20231

Sir:

This Request is responsive to the Office Action dated November 29, 2002. Claims 1-7 are all the claims pending in the application.

The Examiner rejects claims 1 and 5-7 under 35 U.S.C. § 103(a) as being obvious over U.S. 4,366,387 to Carter, Jr. et al. ("Carter") in view of U.S. 5,903,073 to Mukai ("Mukai"); claim 3 under 35 U.S.C. § 103(a) as being obvious over Carter and Mukai, and further in view of U.S. 6,133,659 to Rao ("Rao"); claim 4 under 35 U.S.C. § 103(a) as being obvious over Carter and Mukai, and further in view of U.S. 5,977,667 to Hirose ("Hirose"); and claim 2 under 35 U.S.C. § 103(a) as being obvious over Carter and Mukai, and further in view of U.S. 4,350,898

to Benoit ("Benoit"). Applicants respectfully traverse all of these rejections in view of the following remarks.

Independent claim 1 recites (among other things) that *the stator contacts the fairing*. As compared to conventional pods, the claimed invention (by virtue of the above noted contact feature) has a simplified structure and improved cooling characteristics. At least this feature (in combination with the other recited claim limitations) is not taught or suggested by the prior art relied upon by the rejection grounds.

In the final Office Action, the Examiner again employs the combination of the Carter and the Mukai references to reject claim 1. In fact, comparing the final rejection with the previous Office Action, it appears that large portions of the rejection grounds for claim 1 are word-for-word identical to those previously raised by the Examiner. Applicants still believe that the rejection of claim 1 is incorrect for essentially the same reasons presented in the previous response. Applicants resubmit and elaborate upon the traversal arguments previously submitted as follows.

First, even if those skilled in the art were somehow motivated to combine Carter and Mukai, they would not have arrived at the specific structure defined by claim 1. Instead, and with reference to Fig. 2 of Carter, those skilled in the art would have been motivated (at best) to position the stator of the generator 34 on the inside surface of the generator housing (which is the cylindrical housing positioned between the gear box 36 and the electrical component 40), but not the streamlined housing 32. This is because the secondary reference to Mukai merely discloses

an alternator 1 having a stator 3 with a core 31 mounted on the front half 7 of the alternator housing. Mukai does not, however, provide any relevant teachings regarding the placement of the stator relative to a fairing. Indeed, Mukai's device does not even include a fairing, which is an element that reduces wind drag.

In the Response to Arguments section of the Office Action, the rejection grounds disagree with the above traversal argument because claim 1 does not set forth an explicit definition for the term "fairing." Applicants respectfully assert, however, that it is not necessary to recite such a definition to define over the prior art. The MPEP provides some helpful guidance in this regard. In particular, the Examiner's attention is respectfully directed to MPEP 2111.01, which indicates that during examination, the words of the claim must be given their plain meaning, unless applicant has provided a clear definition in the specification. Further, when the term is not defined by the applicant in the specification, the words must be read as they would be interpreted by those of ordinary skill in the art. In this case, Applicants have not provided a definition of the term "fairing" in the specification. Further, those skilled in the art of wind-powered generators would recognize and interpret the term "fairing" as an element that reduces wind drag, and this interpretation is consistent with the plain meaning of the term.

Further, Applicants wholeheartedly agree with the grounds of rejection to the extent that limitations from the specification should not be read into the claims. Applicants do not contend otherwise. Instead, Applicants respectfully assert that the alleged combination of references involves an incorrect comparison between *apples and oranges*: i.e., the grounds of rejection appear to compare Mukai's alternator housing 7, 8 to Carter's streamlined housing 32. Such a

comparison of elements is incorrect because, for argument sake, Mukai's alternator housing 7, 8 should be compared to Carter's generator housing (not Carter's streamlined housing 32). This comparison is more appropriate because of the similarities (in structure and function) between Mukai's alternator housing 7, 8 and Carter's generator housing. For example, both housings contain bearings that rotatably support a rotor shaft (see the rotor shaft 24 in Fig. 1 of Mukai, and the rotor shaft 90 in Figs. 5 and 6 of Carter). Further, both housings support the other elements (i.e., the stator and the rotor) that are operatively connected to the driving mechanism (i.e., Mukai's pulley 9 and Carter's propeller 14, 16) for the generation of electricity. For these reasons, Mukai's alternator housing 7, 8 and Carter's generator housing are comparable.

In sharp contrast, however, Carter's streamlined housing 32 does not rotatably support the rotor shaft 90 or any other constituent element of the generator 34. Indeed, and with reference to Fig. 6, Carter explains that the generator 34 is supported by a yaw bearing structure 100 provided at the top of the tower 12.[1] In view of these practical and conceptual differences, Mukai's alternator housing 7, 8 is simply not comparable to Carter's streamlined housing 32, as apparently intimated by the grounds of rejection.

Second, the alleged modification to Carter appears to involve dispensing with either the streamlined housing 32 or, in the alternative, the generator housing (which is inside the streamlined housing 32). However, the rejection grounds are not at all clear with respect to the specific modification being relied upon. In any event, Applicants respectfully note that the

[1] Carter, col. 5, l. 29-33.

streamlined housing 32 performs many desirable functions, including shielding electrical components from the exterior environment, and reducing the drag associated with the air flow across the head assembly 18. Consequently, those skilled in the art would not have been motivated to implement any modification that involves dispensing with the streamlined housing 32.

Similarly, Applicants respectfully assert that those skilled in the art would not have been motivated to implement any modification that involves dispensing with the generator housing. This is because such a modification would necessarily involve significant and complicated modifications to the interior surface of the streamlined housing 32. For example, the interior surface of the streamlined housing 32 would need to be drastically altered so that it could appropriately support the constituent elements of the generator 34. Such modifications are far too involved and cumbersome to be considered obvious in view of Mukai.

Third, the grounds of rejection assert that Mukai teaches that the stator core 31 is positioned in contact with the alternator housing (or frame) for the purpose of cooling down the stator coil 32. However, the heavy reliance upon Mukai is misplaced.

Mukai does indicate that it is desirable to cool down the stator coil. To this end, and with reference to Fig. 1 of Mukai, fins (or heat conductive members) 33, 34 are placed in contact with the stator coil 32. Heat generated in the stator coil 32 is conducted to the fins 33, 34; the fins 33,

34 are cooled down by a cooling air flow from fans 25, 26 and heat conduction to the frame.[2] Mukai does not, however, indicate that the contact between the stator core 31 and the frame enhances or facilitates the cooling of the stator coil 32. The assertions in the grounds of rejection to the contrary are simply incorrect. At least in this regard, the relied upon combination of references appears to be based upon an impermissible hindsight of the present application.

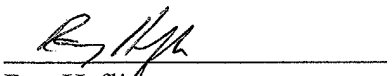
For these reasons, Applicants respectfully assert that claim 1 is patentable, and that claims 2-7 are patentable at least by virtue of their dependencies.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

[2] Mukai, col. 2, l. 7-22.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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